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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,072	04/15/2005	Mauro Maritano	09877.0312-00	7161
22852 7590 01/25/2008 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER GRAY, JILL M	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 01/25/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/500,072	Applicant(s) MARITANO ET AL.	
	Examiner Jill M. Gray	Art Unit 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br/>           Paper No(s)/Mail Date <u>9/14/07</u>.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>           Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
|---|---|

## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on November 8, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 7,155,094 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anelli et al., 6,577,796 B2 and PCT Publication WO 00/21098 (hereinafter referred to collectively as Anelli) in view of Uemura et al., 5,134,036 (Uemura) and Kamachi et al., 5,187,226 (Kamachi).

Anelli is as set forth previously and discloses a telecommunications cable comprising an elongated element housing at least one transmitting element, said element comprising a water-soluble polymer material such as vinyl alcohol/vinyl acetate copolymer, as required by claim 1. See for example abstracts and entire documents. In addition, the elongated element is a tubular element comprising at least one sheath made from said water-soluble polymer material, comprising a double layer sheath in which the inner sheath is made from a water-soluble polymeric composition and the outer sheath is made from a conventional water-insoluble composition, and further comprising a third outer sheath made from water-soluble polymer material, as required

by claims 18-20. Alternatively, Anelli discloses that the elongated element is a grooved core comprising at least one groove longitudinally disposed on the outer surface of said core, as required by claim 21. See for example '796, column 4, lines 35-62. As to the specific composition of the water-soluble polymer material, Anelli discloses that his particular preferred embodiment comprises a vinyl alcohol/vinyl acetate copolymer that can be obtained by partial hydrolysis of the acetate groups of a polyvinyl acetate homopolymer. See column 5, line 50 through column 6, and line 2. Anelli discloses that his composition can contain conventional additives such as plasticizers, wherein at least 5% of the total weight of the composition is plasticizer, and can range from about 1% to about 30% by weight as required by claims 10-11. Additionally, Anelli discloses that the copolymer is present in amounts of at least 50% by weight and more than 75% by weight, per claims 8-9. See for example '796 column 10, lines 17-40 and column 17, lines 12-27. Anelli is silent as to the specific hydrolysis process in forming his vinyl alcohol/vinyl acetate copolymer.

Uemura discloses ethylene-vinyl alcohol copolymers produced by saponification of ethylene-vinyl ester (such as vinyl acetate) in the presence of an antioxidant of the type contemplated by applicants, namely, "IRGANOX 1098". See entire document and for example, columns 3-5. Kamachi discloses vinyl alcohol polymers and copolymers with vinyl acetate that are produced by a process that includes hydrolysis in the presence of an antioxidant such as "IRGANOX 1098" which enhances the degree of polymerization in the presence of oxygen. See entire document, and for example, columns 5-7.

Regarding claims 1, 6-7, 12-17, and 22-26, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Anelli wherein the partial hydrolysis of his copolymer is performed in the presence of an antioxidant such as "IRGANOX 1098", as is known in this art and taught by Uemura and Kamachi in order to enhance the degree of polymerization of the instant claimed copolymer.

Regarding claims 2-5, it is the position of the examiner that the discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art.

Therefore, when considered as whole, the combined teachings of Anelli, Uemura and Kamachi would have rendered obvious the invention as claimed in present claims 1-26. Furthermore, the teachings of Uemura and Kamachi clearly demonstrate that it was well known in the art to hydrolyze vinyl alcohol/vinyl acetate copolymer in the presence of an antioxidant compound of the type contemplated by applicants in the present claims.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

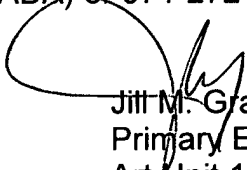
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jill M. Gray  
Primary Examiner  
Art Unit 1794

jmg